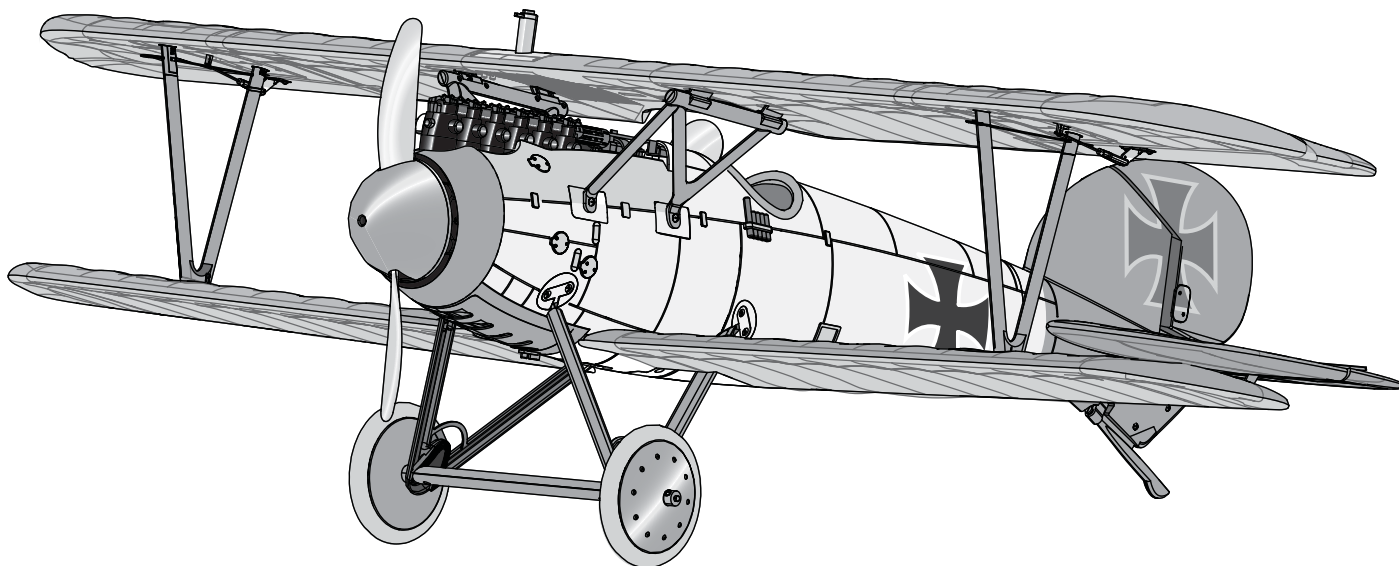




Albatros D. Va

Instruction Manual • Bedienungsanleitung • Manuel d'utilisation • Manuale di Istruzioni



Bind-N-Fly.® Ready to fly. redefined.




NOTICE

All instructions, warranties and other collateral documents are subject to change at the sole discretion of Horizon Hobby, Inc. For up-to-date product literature, visit www.horizonhobby.com and click on the support tab for this product.

Meaning of Special Language:

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:
NOTICE: Procedures, which if not properly followed, create a possibility of physical property damage AND little or no possibility of injury.
CAUTION: Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury.
WARNING: Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.

 **WARNING:** Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury.
This is a sophisticated hobby product. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not attempt disassembly, use with incompatible components or augment product in any way without the approval of Horizon Hobby, Inc. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

Age Recommendation: Not for children under 14 years. This is not a toy.


Safety Precautions and Warnings

As the user of this product, you are solely responsible for operating in a manner that does not endanger yourself and others or result in damage to the product or the property of others.

- Always keep a safe distance in all directions around your model to avoid collisions or injury. This model is controlled by a radio signal subject to interference from many sources outside your control. Interference can cause momentary loss of control
 - Always operate your model in open spaces away from full-size vehicles, traffic and people.
 - Always carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.).
 - Always keep all chemicals, small parts and anything electrical out of the reach of children.
- Always avoid water exposure to all equipment not specifically designed and protected for this purpose. Moisture causes damage to electronics.
 - Never place any portion of the model in your mouth as it could cause serious injury or even death.
 - Never operate your model with low transmitter batteries.
 - Always keep aircraft in sight and under control.
 - Always use fully charged batteries.
 - Always keep transmitter powered on while aircraft is powered.
 - Always remove batteries before disassembly.
 - Always keep moving parts clean.
 - Always keep parts dry.
 - Always let parts cool after use before touching.
 - Always remove batteries after use.
 - Always ensure failsafe is properly set before flying.
 - Never operate aircraft with damaged wiring.
 - Never touch moving parts.

Battery Warning

The Battery Charger included with your aircraft is designed to safely balance and charge the Li-Po battery.

 **CAUTION:** All instructions and warnings must be followed exactly. Mishandling of Li-Po batteries can result in a fire, personal injury, and/or property damage.

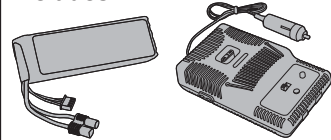
- By handling, charging or using the included Li-Po battery, you assume all risks associated with lithium batteries.
- If at any time the battery begins to balloon or swell, discontinue use immediately. If charging or discharging, discontinue and disconnect. Continuing to use, charge or discharge a battery that is ballooning or swelling can result in fire.
- Always store the battery at room temperature in a dry area for best results.
- Always transport or temporarily store the battery in a temperature range of 40–120° F (5–49° C). Do not store battery or aircraft in a car or direct sunlight. If stored in a hot car, the battery can be damaged or even catch fire.
- Always charge batteries away from flammable materials.
- Always inspect the battery before charging and never charge damaged batteries.
- Always disconnect the battery after charging, and let the charger cool between charges.

- Always constantly monitor the temperature of the battery pack while charging.
- ONLY USE A CHARGER SPECIFICALLY DESIGNED TO CHARGE LI-PO BATTERIES. Failure to charge the battery with a compatible charger may cause fire resulting in personal injury and/or property damage
- Never discharge Li-Po cells to below 3V under load.
- Never cover warning labels with hook and loop strips.
- Never leave charging batteries unattended.
- Never charge batteries outside recommended levels.
- Never attempt to dismantle or alter the charger.
- Never allow minors to charge battery packs.
- Never charge batteries in extremely hot or cold places (recommended between 40–120° F or 5–49° C) or place in direct sunlight.





– Introduction –

Welcome to one of the most exciting and unique park flyer experiences you will ever have. Compared to the Spartan look of most World War I airplanes, the smooth, rounded fuselage and flowing lines of the Albatros D.Va made it one of the more daring designs of its time. The ParkZone team has done a fantastic job of recreating this Western Front warrior without sacrificing any of the smooth flying characteristics you've come to expect from a park flyer. Before you take your first flight though, you must read this manual. Along with the assembly instructions, you'll find all kinds of important setup tips that will make your first flight, and everyone after, the best it can be.

BNF
Includes



Included Screws

	Size	Qty
	1.5X6mm	4
	1.5X8mm	4
	2.5X8mm	9
	3X10mm	6

Spare fasteners may be included.

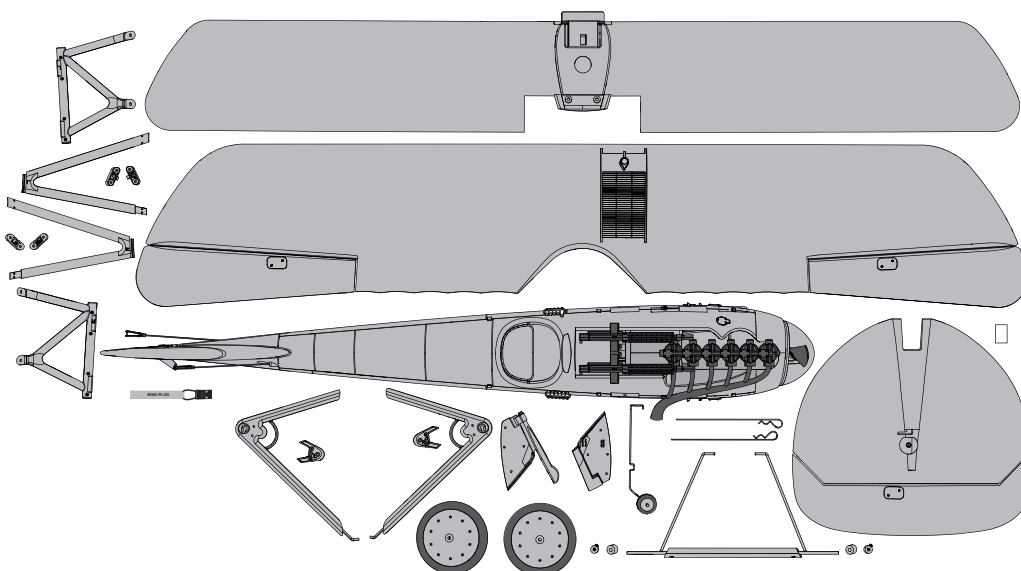
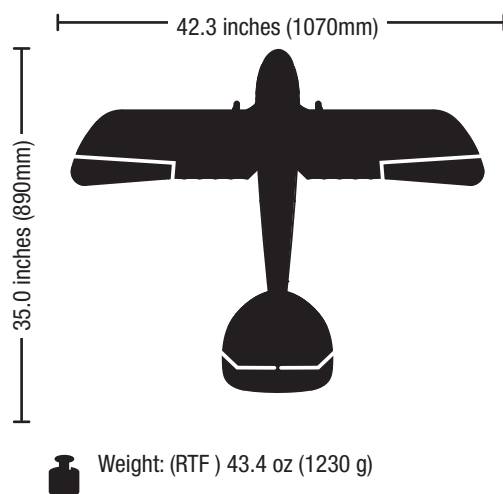


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Bind-N-Fly® Aircraft

Installed

Installed

Installed

Installed

Included

Needed to
Complete

Needed to
Complete

Needed to
Complete

Plug-N-Play® Aircraft

Installed

Installed

Installed

Needed to
Complete

Needed to
Complete

Needed to
Complete

Needed to
Complete

Needed to
Complete



480 size BL outrunner; 960Kv

EFL 30A Pro SB brushless ESC

(4) Servos

Recommended Receiver: Spektrum™ DSM2® or DSMX® full range or park flyer sport receiver

Battery: 1800mA 11.1V 3S Li-Po
Battery Charger: 300mA–2.0A
2–3 cell Li-Po battery charger

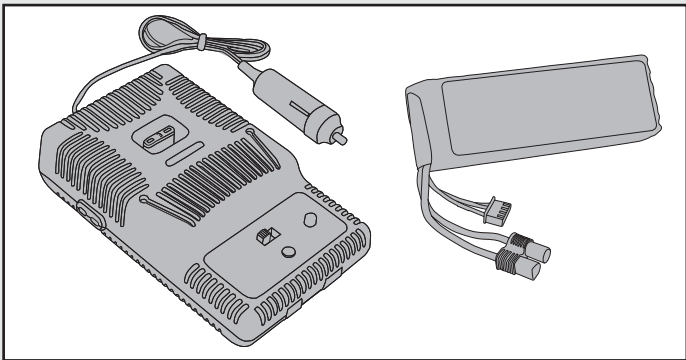
Recommended Transmitter:
Full-Range 2.4GHz with Spektrum™
DSM2®/DSMX® technology.

To register your product online, visit www.parkzone.com



Charging the Flight Battery

Your Albatros D. Va comes with a DC balancing charger and 3S Li-Po battery. You should only charge your battery with the included charger. Never leave the battery and charger unattended during the charge process. Failure to follow the instructions properly could result in a fire. When charging, ensure the battery is on a heat-resistant surface. Charge the flight battery while assembling the aircraft. Install the fully charged battery to perform control tests and binding.



DC Li-Po Balancing Charger Features

- Balances and Charges 2- to 3-cell lithium polymer battery packs
- Variable charge rates from 300mAh to 2-amp
- Simple single push-button operation
- LED charge status indicator
- LED cell balance indicator
- Audible beeper indicates power and charge status
- 12V accessory outlet input cord

Specifications

- Input power: 12V DC, 3-amp
- Charges 2- to 3-cell Li-Po packs with minimum capacity of 300mAh

3S 11.1V 1800mAh Li-Po battery pack (PKZ1031)
The ParkZone® 3S Li-Po battery pack features a balancing lead that allows you to safely charge your battery pack when used with the included ParkZone Li-Po balancing charger.

CAUTION: The balance connector must be inserted into the correct port of your charger prior to charging.

The Battery Charging Process

1. Charge only batteries that are cool to the touch and are not damaged. Look at the battery to make sure it is not damaged e.g., swollen, bent, broken or punctured.
2. Attach the input cord of the charger to the appropriate power supply (12V accessory outlet).
3. When the Li-Po charger has been correctly powered up, there will be an approximate 3-second delay, then an audible “beep” and the green (ready) LED will flash.
4. Turn the control on the Amps selector so the arrow points to the charging rate required for the battery (the Albatros D. Va 1800mAh Li-Po battery will charge at 1.5 amps). DO NOT change the charge rate once the battery begins charging.
5. Move the cell selector switch to 2-cell or 3-cell depending on your battery.
6. Connect the Balancing Lead of the Battery to the 3-cell (it has 4 pins) charger port.
7. The green and red LEDs may flash during the charging process when the charger is balancing cells. Balancing prolongs the life of the battery.
8. When the battery is fully charged, there will be an audible beep for about 3 seconds and the green LED will shine continuously. Attempting to charge an over-discharged battery will cause the charger to repeatedly flash and beep, indicating an error has occurred.
9. Always unplug the battery from the charger immediately upon completion of charging.

CAUTION: Overcharging a battery can cause a fire.

CAUTION: Only use a charger specifically designed to charge a Li-Po battery. Failure to do so could result in fire causing injury or property damage.

CAUTION: Never exceed the recommended charge rate.

NOTICE: If using a battery other than the included Li-Po battery, refer to your battery manufacturer’s instructions for charging.

Low Voltage Cutoff (LVC)

When a Li-Po battery is discharged below 3V per cell, it will not hold a charge. The ESC protects the flight battery from over-discharge using Low Voltage Cutoff (LVC). Before the battery charge decreases too much, LVC removes power supplied to the motor. Power to the motor pulses, showing that some battery power is reserved for flight control and safe landing.

When the motor pulses, land the aircraft immediately and recharge the flight battery.
Disconnect and remove the Li-Po battery from the aircraft after use to prevent trickle discharge. Charge your Li-Po battery to about half capacity before storage. During storage, make sure the battery charge does not fall below 3V per cell.



Transmitter and Receiver Binding

Binding is the process of programming the receiver of the control unit to recognize the GUID (Globally Unique Identifier) code of a single specific transmitter. You need to 'bind' your chosen Spektrum™ DSM2®/DSMX® technology equipped aircraft transmitter to the receiver for proper operation.

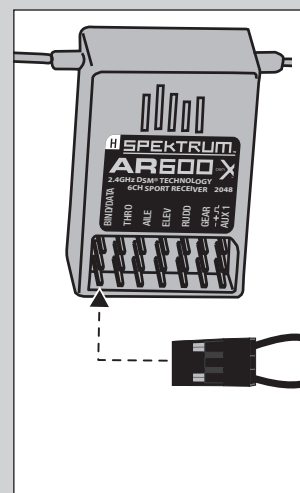
Please visit www.bindnfly.com for a complete list of compatible transmitters.

NOTICE: When using a Futaba transmitter with a Spektrum DSM® module, you must reverse the throttle channel.

BIND PLUG



✓	Binding Procedure Reference Table
1.	Read the transmitter instructions for binding to a receiver (location of transmitter's Bind control).
2.	Make sure the transmitter is powered off.
3.	Move the transmitter controls to neutral (flight controls: rudder, elevators and ailerons) or to low positions (throttle, throttle trim).*
4.	Install a bind plug in the receiver bind port or bind extension.
5.	Connect the flight battery to the ESC. The ESC will produce a series of sounds. One long tone, then three short tones confirm that the LVC is set for the ESC.
6.	The receiver LED will begin to flash rapidly.
7.	Power on the transmitter while holding the transmitter bind button or switch. Refer to your transmitter's manual for binding button or switch instructions.
8.	When the receiver binds to the transmitter, the light on the receiver will turn solid and the ESC will produce a series of three ascending tones. The tones will indicate the ESC is armed, provided the throttle stick and throttle trim are low enough to trigger arming.
9.	Remove the bind plug from the bind port or bind extension.
10.	Safely store the bind plug (some owners attach the bind plug to their transmitter using two-part loops and clips).
11.	The receiver should retain the binding instructions received from the transmitter until another binding is done.



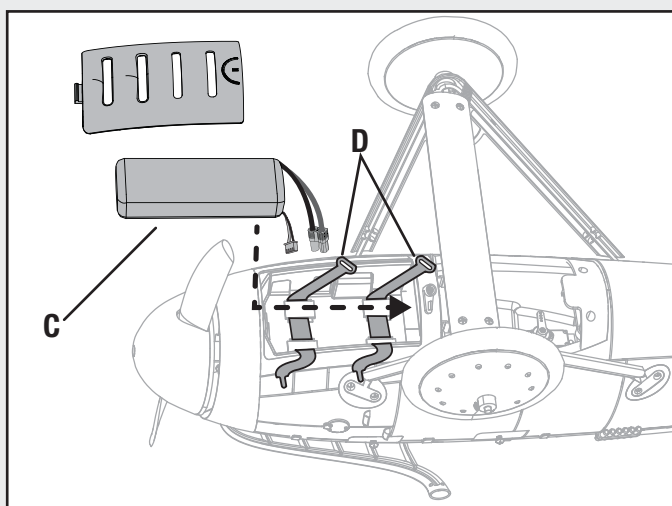
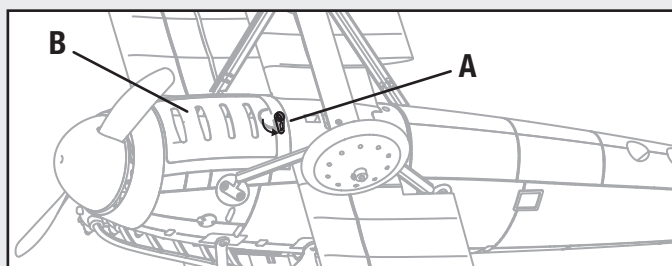
* The throttle will not arm if the transmitter's throttle control is not put at the lowest position. If you encounter problems, follow the binding instructions and refer to the transmitter troubleshooting guide for other instructions. If needed, contact the appropriate Horizon Product Support office.

Installing the Battery

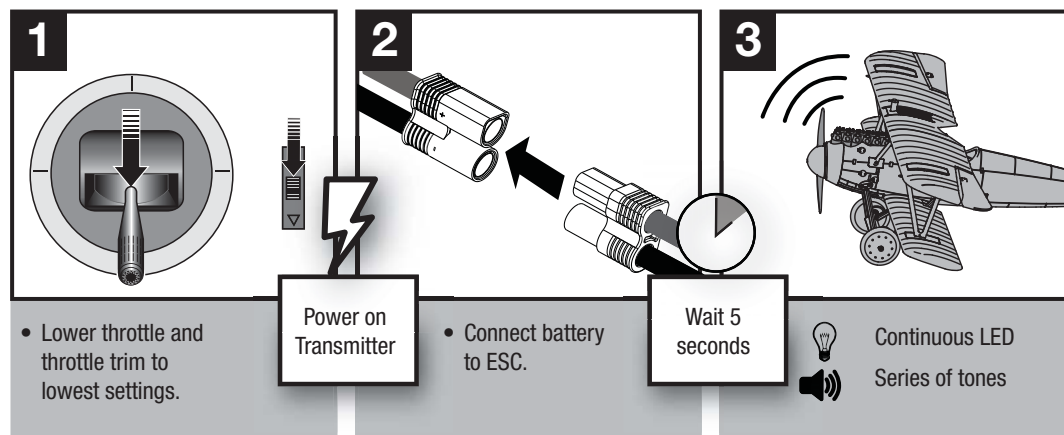
1. Turn the aircraft over so that the landing gear faces up.
2. Turn the latch (A) and remove the battery door (B).
3. Install the flight battery (C) all the way to the front of the battery compartment. Connect the battery to the ESC power connector.
4. Make sure the flight battery is secured using two hook and loop straps (D).
5. Install the battery door and turn the latch to secure the door closed.

⚠ CAUTION: Always disconnect the Li-Po battery from the aircraft receiver when not flying to avoid over-discharging the battery. Batteries discharged to a voltage lower than the lowest approved voltage may become damaged, resulting in loss of performance and potential fire when batteries are charged.

⚠ CAUTION: Always keep hands away from the propeller. When armed, the motor will turn the propeller in response to any throttle movement.



Before Flight



PNP
PLUG-N-PLAY®

Installing a Receiver

- Before installing the wing, install your park flyer or full range receiver in the fuselage using hook and loop tape or double-sided servo tape.
- Attach the elevator and rudder servo connectors to the appropriate channels of the receiver.
- Attach the aileron Y-harness to the aileron channel of the receiver.
- Attach the ESC connector to the throttle channel of the receiver.

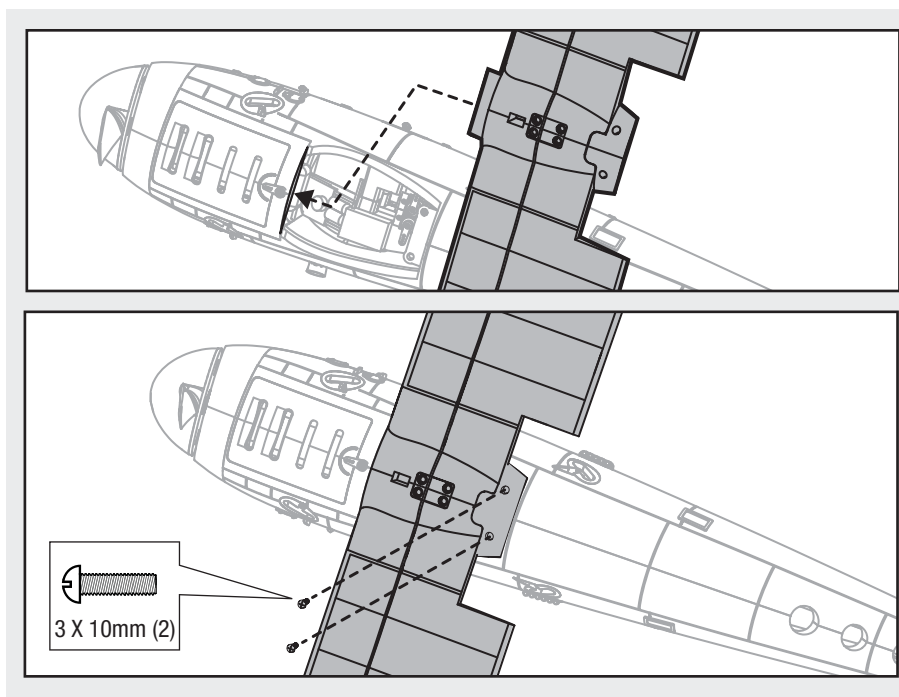
Battery Selection and Installation

- We recommend the ParkZone 1800mAh 11.1V 3S Li-Po battery (PKZ1031).
- If using another battery, the battery must be at least a 1800mAh battery.
- Your battery should be approximately the same capacity, dimensions and weight as the ParkZone Li-Po battery to fit in the fuselage without changing the center of gravity a large amount.

Installing Lower Wing

- Turn the aircraft and lower wing over so the bottom side faces up.
- Install the wing's mounting plate in the fuselage.
- Align and attach the wing to the fuselage using 2 screws.

When needed, disassemble in reverse order.

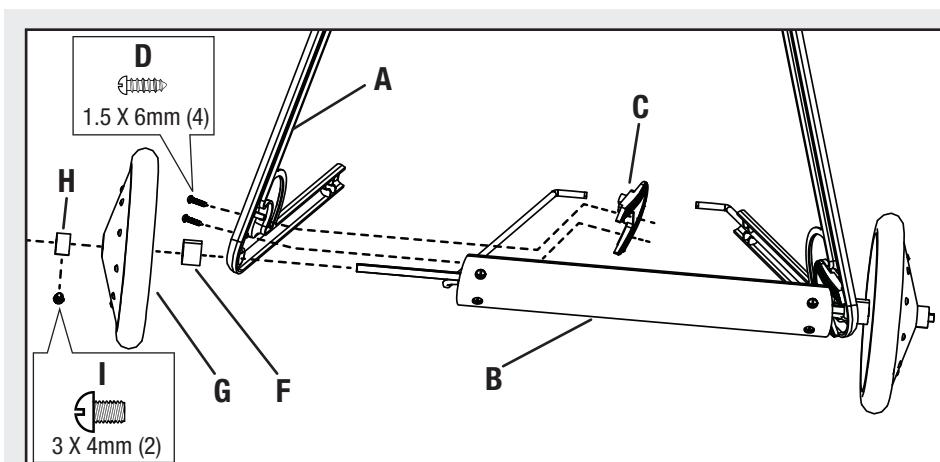


Installing Landing Gear

Assembling Landing Gear

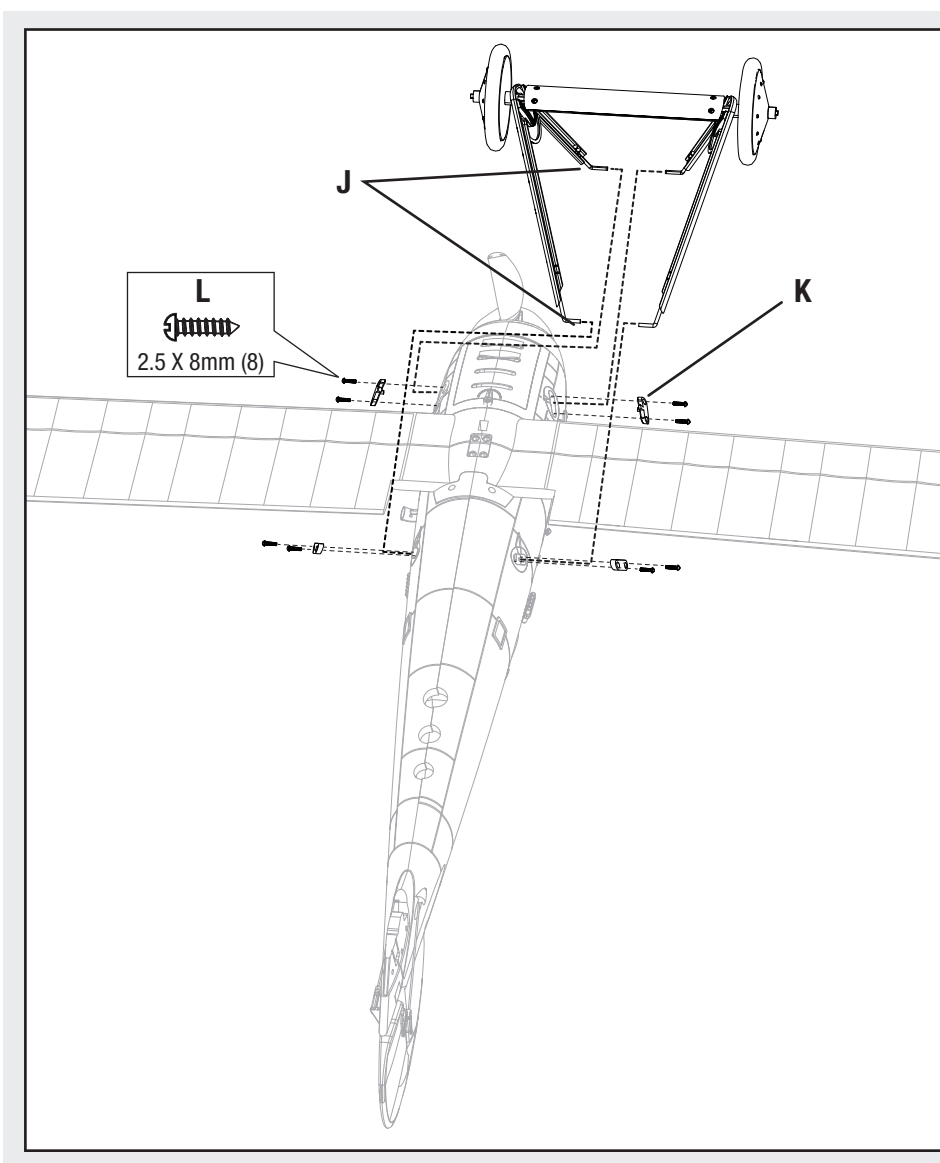
1. Install the left and right (marked L and R) landing gear covers (A) on the axle assembly (B) using left and right simulated shock absorbers (C) (marked L and R) and 4 screws (D).
2. Install a spacer (F) and wheel (G) on each end of the axle using a wheel collar (H) and setscrew (I).

Tip: Use a small amount of threadlock on the screw of the wheel collar to ensure the wheel is secured to the axle.



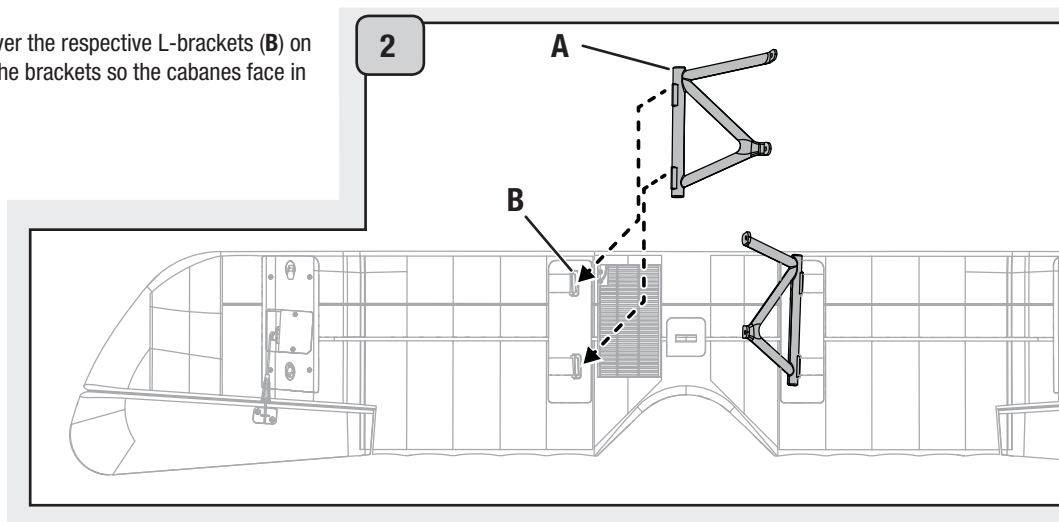
Attaching Landing Gear

1. Turn the fuselage so that the bottom of the wing faces up.
2. Carefully install the front, then the rear of the assembled landing gear (J) in the fuselage slots. It takes a small amount of force to spread the landing gear enough to insert it into the fuselage slots.
3. Install the left and right, back and front (marked LB, RB, LF and LB) plates (K) over the fuselage slots using 8 screws (L).
4. Where needed, disassemble in reverse order, carefully spread the landing gear wires to remove the assembly from the fuselage.



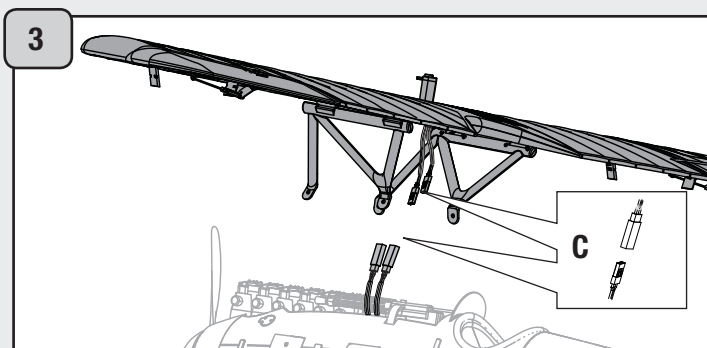
Installing Upper Wing

1. Rest the aircraft on its landing gear.
2. Install the left and right cabanes (A) over the respective L-brackets (B) on the upper wing. Turn the cabanes on the brackets so the cabanes face in as shown.



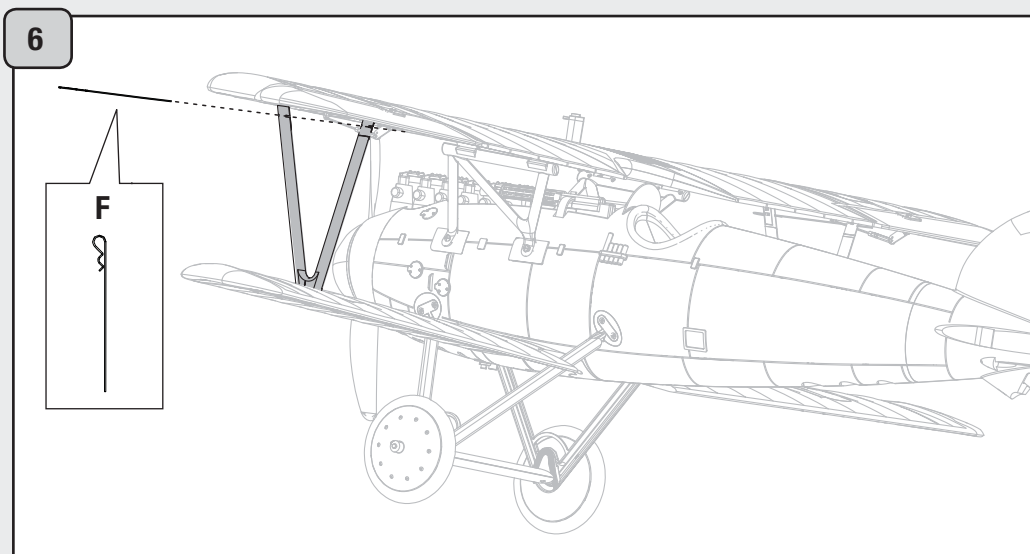
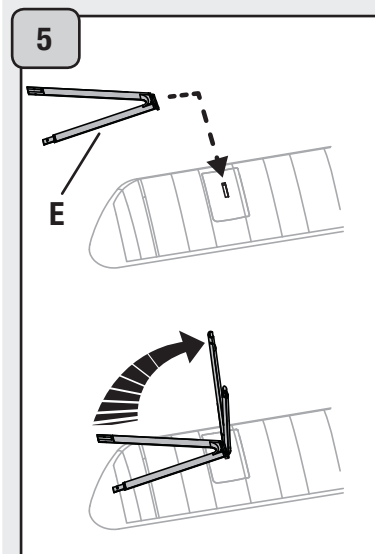
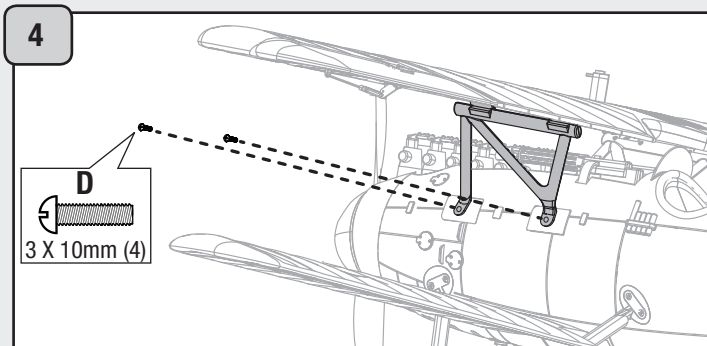
3. Hold the cabanes and turn the upper wing over the fuselage to connect the aileron connectors to the Y-harness connectors (C) in front of the cockpit. The left and right aileron servos can be connected to either side of the Y-harness.
4. Attach the cabanes to the fuselage using the included 4 screws (D).

TIP: Spread apart both wings a small amount when installing the left and right interplane struts in the lower wing.



5. Insert the L-brackets of the left and right interplane struts (E) in the slots in the lower wing as shown.
6. Align the tops of each interplane strut with mounts in the upper wing and install a retainer pin (F) through the aligned holes. Secure the loop of each pin around a front strut.

When needed, disassemble in reverse order.

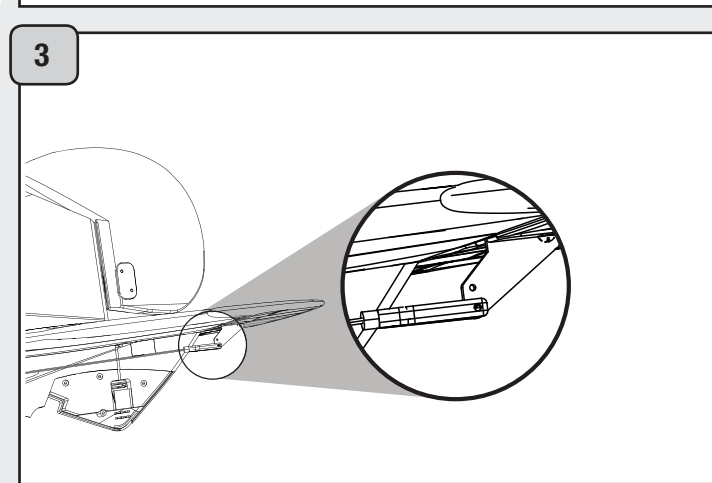
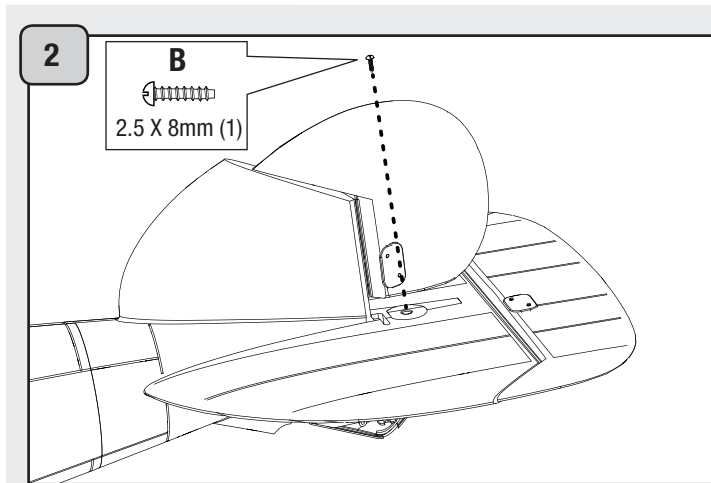
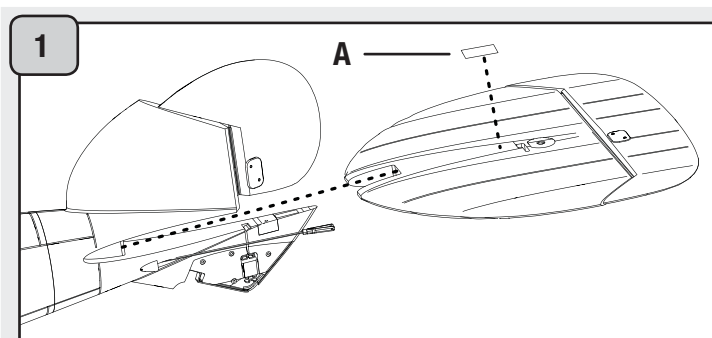


Installing Tail

1. Place a piece of supplied double-sided tape (**A**) on the horizontal tail as shown, then install the horizontal tail on the fuselage.

Tip: A drop of CA (cyanoacrylate adhesive) can be used instead of tape. Only use a small amount to allow for removal of the horizontal stabilizer.

2. Turn the rudder to the right or left and secure the horizontal tail to the fuselage using a screw (**B**).
3. Connect the linkage clevis to the outermost hole on the elevator control horn. Where needed, disassemble in reverse order.

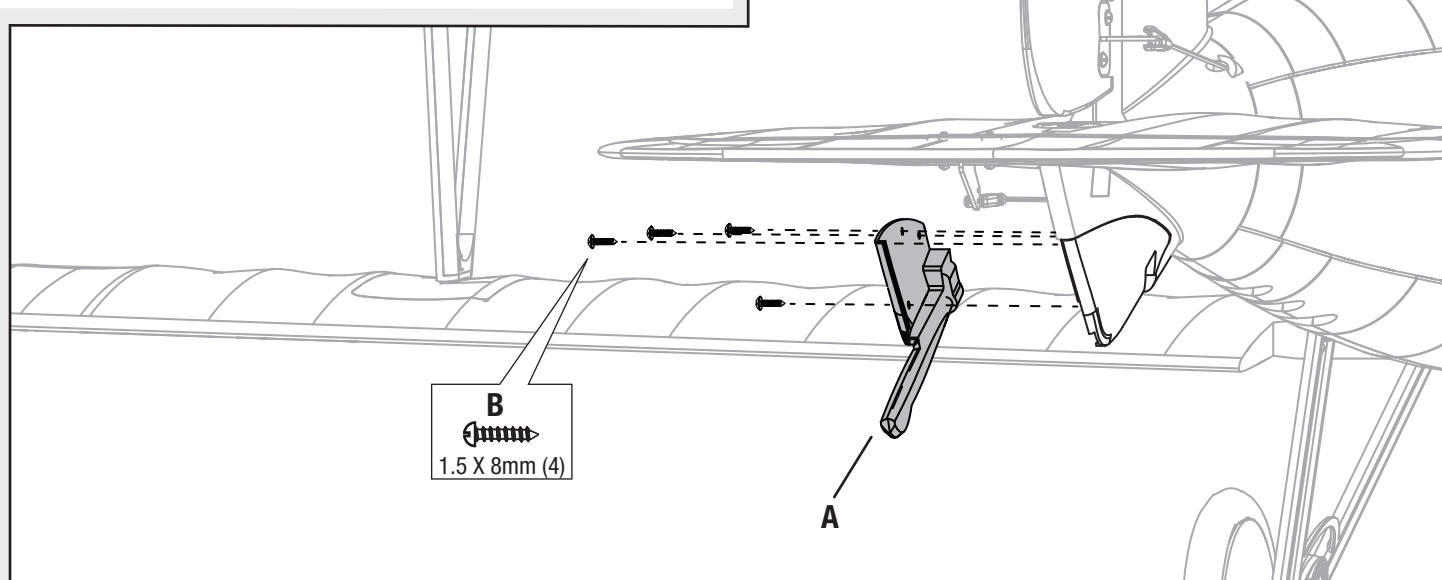


Installing Optional Tail Skid

As desired, install the non-steerable skid for grass runways and scale appearance.

Installing the Tail Skid

1. Install the skid plate (**A**) on the fuselage using 4 screws (**B**).



Installing Optional Tail wheel

As desired, install the steerable tail wheel for hard finished runways.

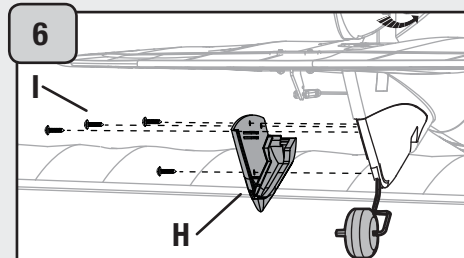
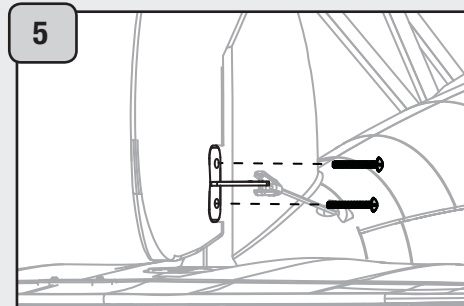
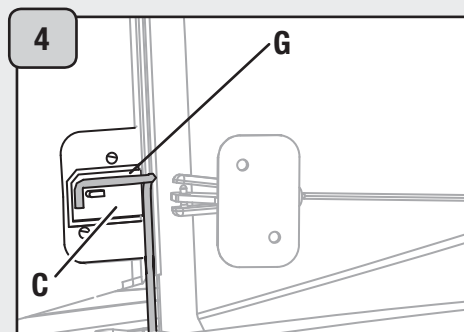
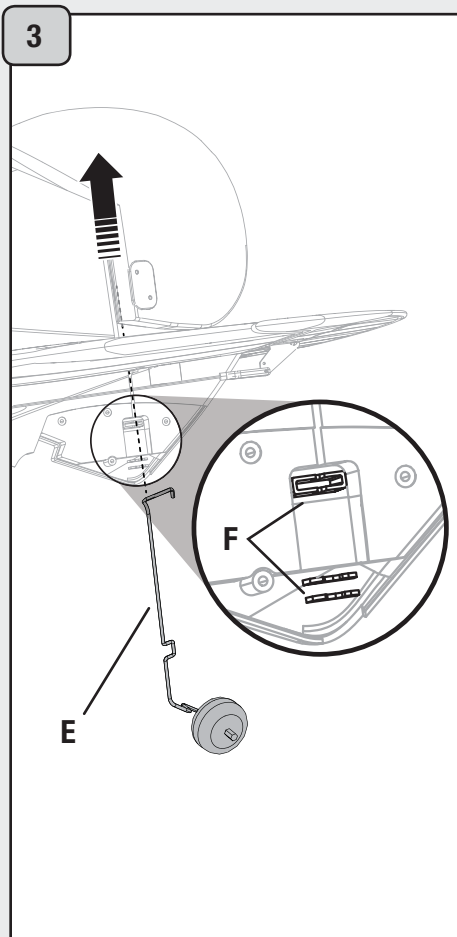
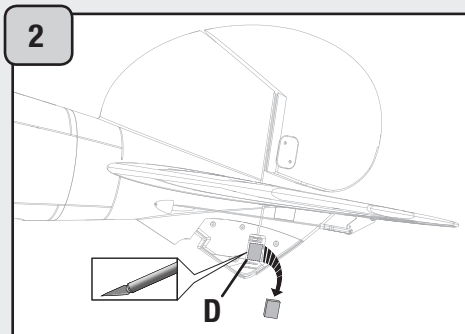
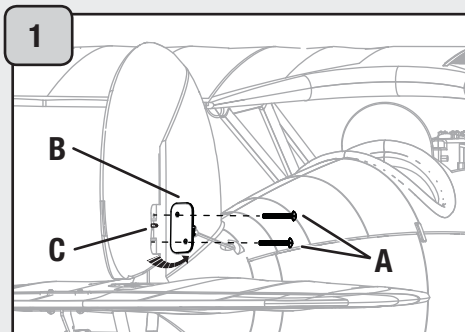
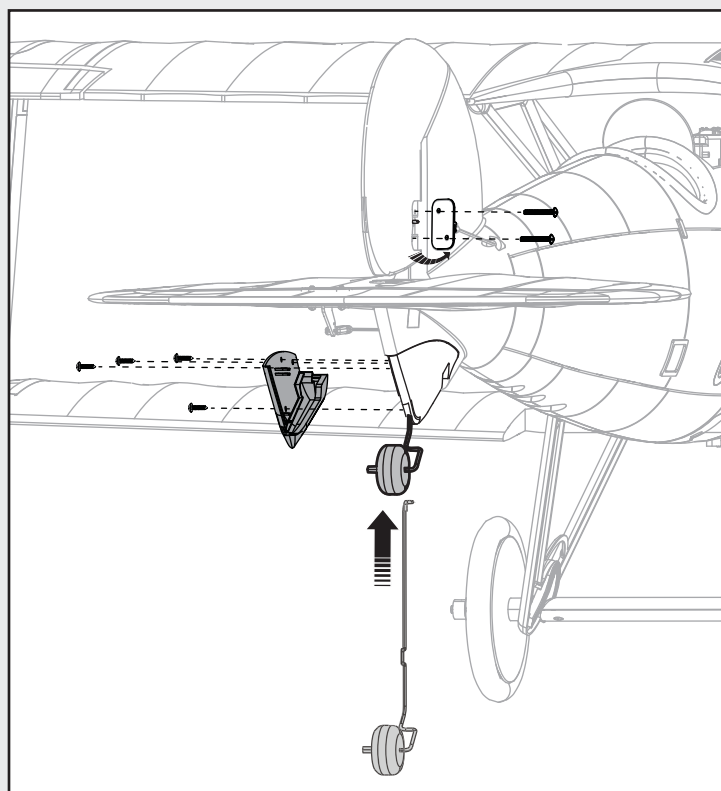
Installing the Tail Wheel

1. Remove the 2 screws (A) from the rudder control horn (B) and turn the rudder to the left. Turn the control horn on the clevis for more space and to expose the rudder box (C) as shown.

NOTICE: Do NOT remove the back plate from the other side of the rudder or the decal and paint will be damaged.

2. Cut a channel (D) in the fuselage foam for the tail wheel wire.
3. Turn, then push up the wheel wire (E) through the L-shaped channel in the horizontal stabilizer to the rudder box on the right side of the rudder. Align the wheel wire in the channels (F) lower in the fuselage.
4. Turn the wheel wire (G) so the hook on the wire goes over the block in the rudder box (C).
5. Install the rudder horn over the rudder box using 2 control horn screws.
6. Cover the wire using the wheel plate (H) and 4 screws (I).

Disassemble in reverse order.

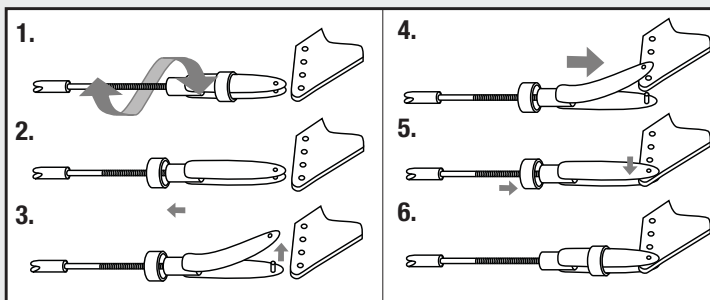


Installing Clevises on Control Horns and Control Centering

Tip: Turn the clevis on the linkage to change the length of the linkage between the servo arm and the control horn.

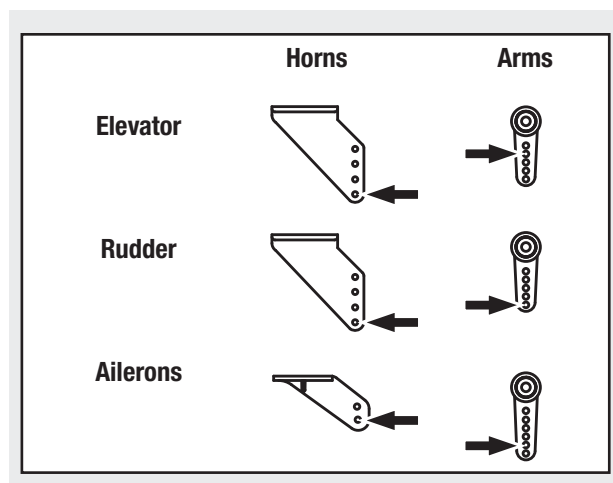
- Pull the tube from the clevis to the linkage.
- Carefully spread the clevis, then insert the clevis pin into the desired hole in the control horn.
- Move the tube to hold the clevis on the control horn.

After binding a transmitter to the model receiver, set the trims and sub-trims to 0, then adjust the clevises to center the control surfaces.



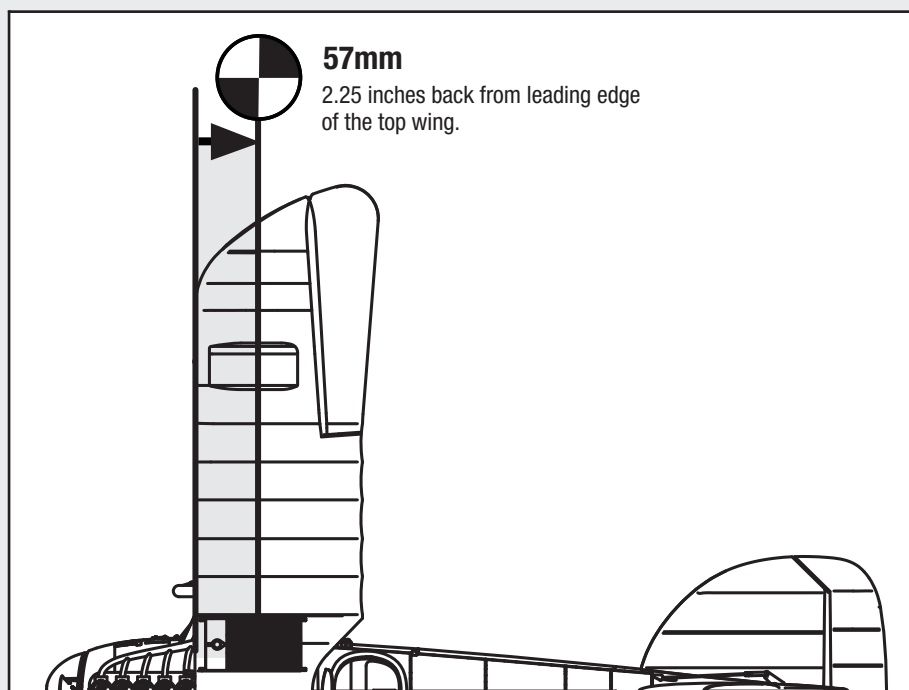
Factory Settings

Fly the model at factory settings before making changes. For pilots who wish to fly the model with more control throw, adjust the position of the linkages on the servo arms and control horns for increased travel.



Center of Gravity (CG)

Install the flight battery all the way to the front of the battery compartment. Make sure the flight battery is secured using hook and loop straps. It is easiest to balance the Albatros D. Va with the aircraft upright.

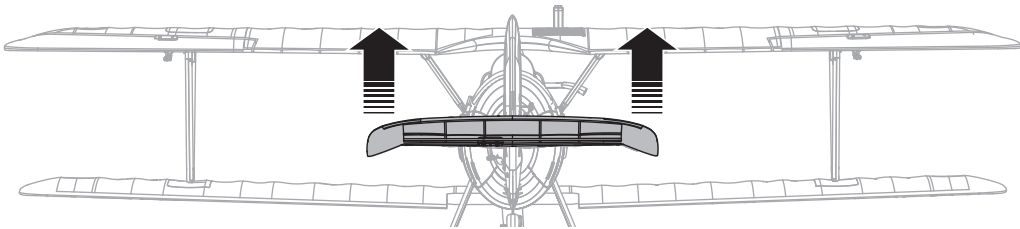


Control Direction Test

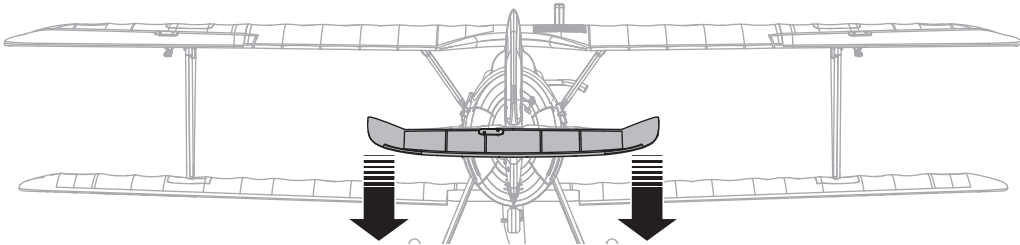
Bind your aircraft and transmitter before doing these tests. Move the controls on the transmitter to make sure the aircraft control surfaces move correctly and in the proper direction. After performing the Control Test, correctly set the failsafe. Make sure the transmitter controls are at neutral and the throttle and throttle trim are in the low position, then rebind the model to your transmitter. If the receiver loses its link to the transmitter, the failsafe makes the controls and throttle go to these settings made at binding.

Elevator

Up Elevator Command

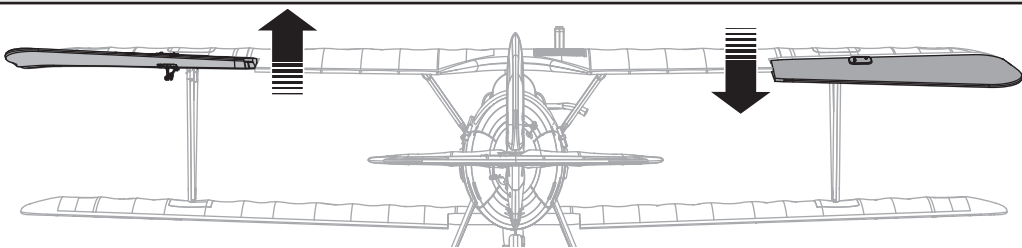


Down Elevator Command

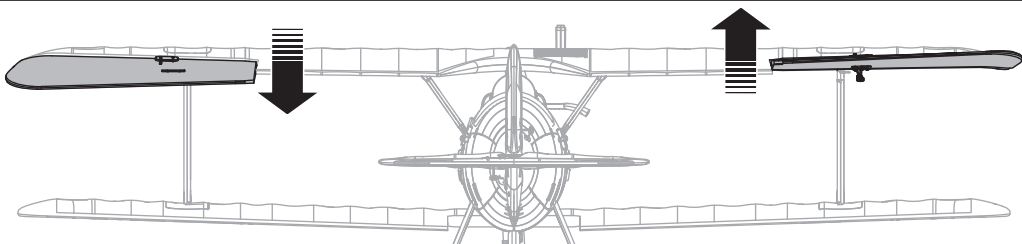


Aileron

Stick Left

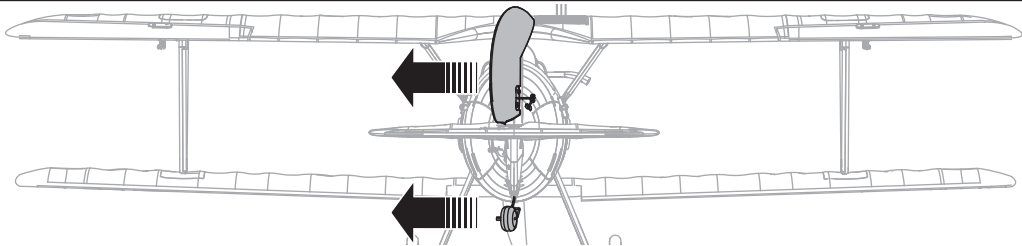


Stick Right

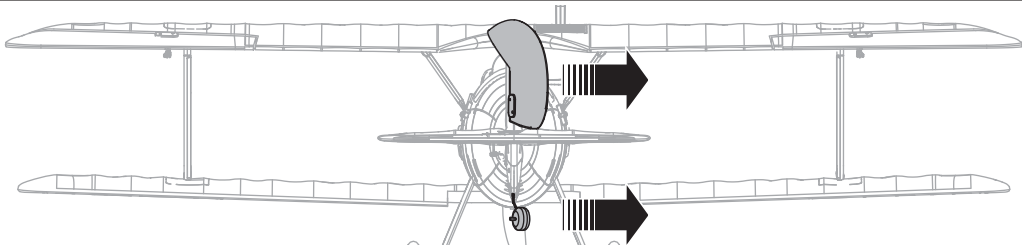


Rudder

Stick Left



Stick Right



Dual Rates

Your DSM2/DSMX full range transmitter features dual rates to help you select the amount of travel that you want from the control surfaces.

	High Rate	Low Rate
Aileron	40mm up/30 down	26mm up/24down
Elevator	20mm up/down	15mm up/down
Rudder	40mm left/right	30mm left/right

The ailerons are factory pre-set to allow for more up travel than down (differential).

Service of Power Components

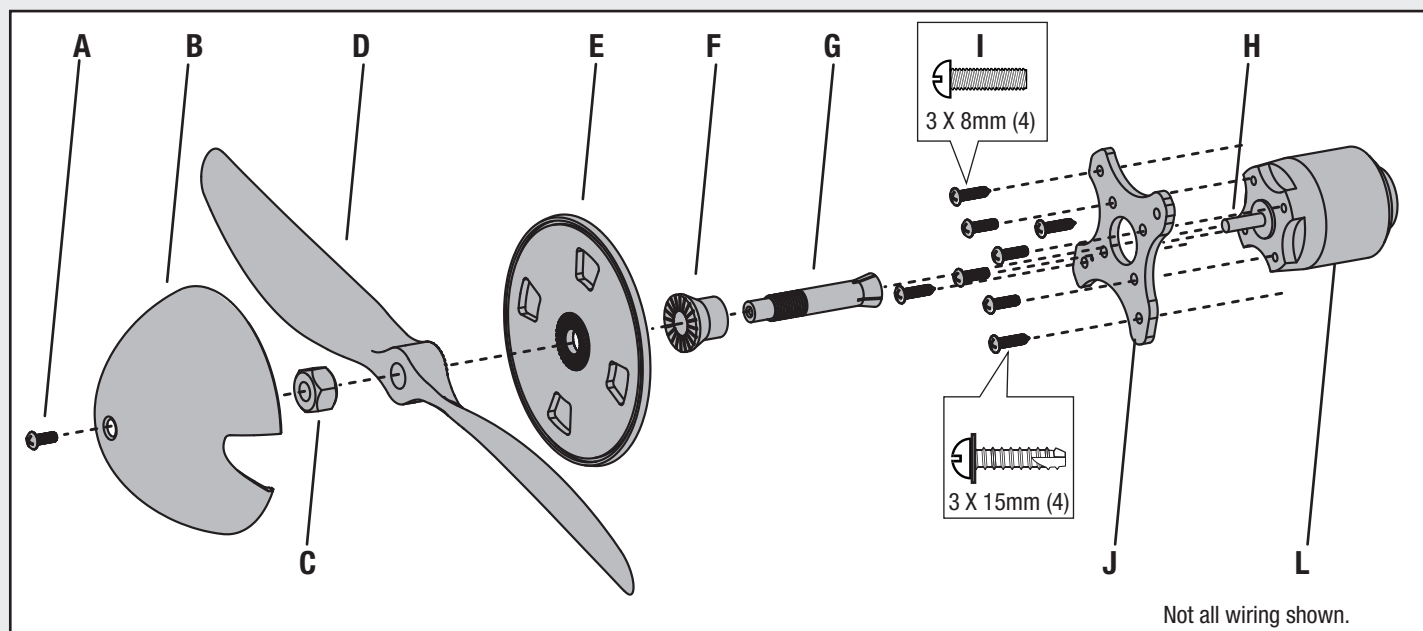
Disassembly

1. Remove the screw (A) and spinner (B) from the collet (G).
2. Remove the spinner nut (C), propeller (D), spinner backplate (E), backplate (F) and collet (G) from the motor shaft (H). You will need a tool to turn the spinner nut.
3. Remove the 4 screws (I) from the motor mount (J) and the fuselage.
4. Disconnect the motor wires from the ESC wires.
5. Remove the 4 screws (K) and motor (L) from the motor mount.

Assembly

Assemble in reverse order.

Correctly align the wire the colors and connect the motor to the ESC. The propeller side with the numbers for diameter and pitch (for example, 10 X 8) should face rearward, toward the motor. The grips on the propeller will also face rearward, toward the motor. Use a tool to tighten the spinner nut on the propeller.



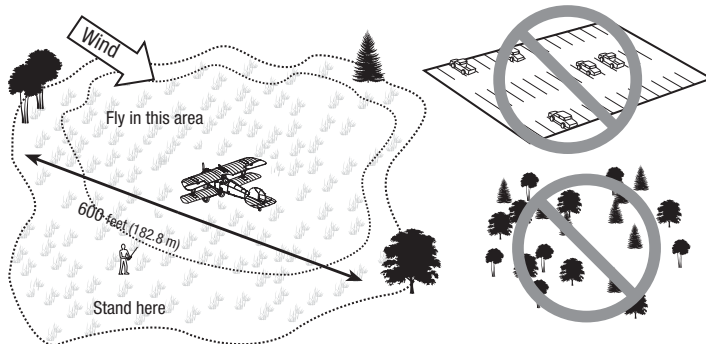
Flying Tips and Repairs

Range Check your Radio System

After final assembly, range check the radio system with the Albatros D. Va. Refer to your specific transmitter instruction manual for range test information.

Flying

Always choose a wide-open space for flying your ParkZone Albatros D. Va. It is ideal for you to fly at a sanctioned flying field. If you are not flying at an approved site, always avoid flying near houses, trees, wires and buildings. You should also be careful to avoid flying in areas where there are many people, such as busy parks, schoolyards, or soccer fields. Consult local laws and ordinances before choosing a location to fly your aircraft.



Takeoff:

Start with full up elevator and slowly increase power while decreasing the amount of up elevator. As the airplane reaches flying speed, you should only be holding a slight amount of up elevator. Allow the aircraft to fly off the ground and avoid forcing the aircraft into the air.

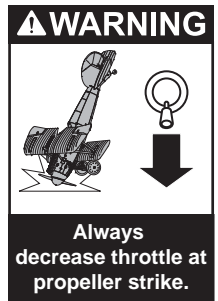
Landing

Flight times of 8 minutes or more are achievable if using proper throttle management. For your first flights, set your transmitter timer or a stopwatch to **5 minutes**. Adjust your timer for longer or shorter flights once you have flown the model. When the motor pulses, land the aircraft immediately and recharge the flight battery. It is not recommended to fly the battery to LVC.

NOTICE: Repeated flying to the LVC will damage your battery.

Due to the scale landing gear and characteristics of the aircraft, keep the wings level throughout the flight and when landing or taxiing. An optional tail wheel has been included to help with ground handling.

You should land the aircraft using a wheel landing (two point). If the power is pulled all the way back when landing, the propeller acts like an air brake, which can lead to the elevator being less effective. Therefore, it is advisable to land with some amount of power on, as it allows more time to flare the airplane for a smooth landing. When setting up for landing, fly the airplane down to the ground using 1/4–1/3 throttle to allow for enough energy for a proper flare.



Simulated Air to Air combat

Install the optional Sonic Combat Module™ (SCM) (HBZ4020) and Sonic Combat Adapter (PKZ1055) into your ParkZone World War I warbirds to recreate epic WWI air to air combat.

Each aircraft requires both an SCM and a Sonic Combat Adapter (connected to the receiver) to participate in simulated air combat.

Before flying in simulated air combat environments, ensure you are confident enough in your abilities as a pilot to anticipate momentary throttle cutoff. For more information, visit horizonhobby.com.

NOTICE: When finished flying, never keep the airplane in the sun. Do not store the aircraft in a hot, enclosed area such as a car. Doing so can damage the foam.

Repairs

Thanks to the Z-Foam™ construction of the Albatros D. Va, repairs to the foam can be made using virtually any adhesive (hot glue, regular CA cyanoacrylate, epoxy, etc). When parts are not repairable, see the Replacement Parts List for ordering by item number.

NOTICE: Use of CA accelerant on your aircraft can damage paint. DO NOT handle the aircraft until the accelerant fully dries.

First Flight Preparation

1. Remove and inspect contents.
2. Charge flight battery.
3. Read this instruction manual thoroughly.
4. Fully assemble model.
5. Install the flight battery in the aircraft (once it has been fully charged).
6. Bind aircraft to your transmitter.
7. Make sure linkages move freely.
8. Perform the Control Direction Test with the transmitter.
9. Adjust flight controls and transmitter.
10. Perform a radio system Range Check.
11. Find a safe and open area.
12. Plan flight for flying field conditions.

Maintenance After Flying

1. Disconnect flight battery from ESC (Required for Safety and battery life).
2. Power off transmitter.
3. Remove flight battery from aircraft.
4. Recharge flight battery.
5. Repair or replace all damaged parts.
6. Store flight battery apart from aircraft and monitor the battery charge.
7. Make note of flight conditions and flight plan results, planning for future flights.

AMA National Model Aircraft Safety Code

Effective January 1, 2011

A. GENERAL

A model aircraft is a non-human-carrying aircraft capable of sustained flight in the atmosphere. It may not exceed limitations of this code and is intended exclusively for sport, recreation and/or competition. All model flights must be conducted in accordance with this safety code and any additional rules specific to the flying site.

1. Model aircraft will not be flown:
 - (a) In a careless or reckless manner.
 - (b) At a location where model aircraft activities are prohibited.
2. Model aircraft pilots will:
 - (a) Yield the right of way to all man carrying aircraft.
 - (b) See and avoid all aircraft and a spotter must be used when appropriate. (AMA Document #540-D-See and Avoid Guidance.)
 - (c) Not fly higher than approximately 400 feet above ground level within three (3) miles of an airport, without notifying the airport operator.
 - (d) Not interfere with operations and traffic patterns at any airport, heliport or seaplane base except where there is a mixed use agreement.
 - (e) Not exceed a takeoff weight, including fuel, of 55 pounds unless in compliance with the AMA Large Model Aircraft program. (AMA Document 520-A)
 - (f) Ensure the aircraft is identified with the name and address or AMA number of the owner on the inside or affixed to the outside of the model aircraft. (This does not apply to model aircraft flown indoors).
 - (g) Not operate aircraft with metal-blade propellers or with gaseous boosts except for helicopters operated under the provisions of AMA Document #555.
 - (h) Not operate model aircraft while under the influence of alcohol or while using any drug which could adversely affect the pilot's ability to safely control the model.
 - (i) Not operate model aircraft carrying pyrotechnic devices which explode or burn, or any device which propels a projectile or drops any object that creates a hazard to persons or property.

Exceptions:

 - Free Flight fuses or devices that burn producing smoke and are securely attached to the model aircraft during flight.
 - Rocket motors (using solid propellant) up to a G-series size may be used provided they remain attached to the model during flight. Model rockets may be flown in accordance with the National Model Rocketry Safety Code but may not be launched from model aircraft.
 - Officially designated AMA Air Show Teams (AST) are authorized to use devices and practices as defined within the Team AMA Program Document (AMA Document #718).
 - (j) Not operate a turbine-powered aircraft, unless in compliance with the AMA turbine regulations. (AMA Document #510-A).
3. Model aircraft will not be flown in AMA sanctioned events, air shows or model demonstrations unless:
 - (a) The aircraft, control system and pilot skills have successfully demonstrated all maneuvers intended or anticipated prior to the specific event.
 - (b) An inexperienced pilot is assisted by an experienced pilot.
4. When and where required by rule, helmets must be properly worn and fastened. They must be OSHA, DOT, ANSI, SNELL or NOCSAE approved or comply with comparable standards.

B. RADIO CONTROL

1. All pilots shall avoid flying directly over unprotected people, vessels, vehicles or structures and shall avoid endangerment of life and property of others.
2. A successful radio equipment ground-range check in accordance with manufacturer's recommendations will be completed before the first flight of a new or repaired model aircraft.
3. At all flying sites a safety line(s) must be established in front of which all flying takes place (AMA Document #706-Recommended Field Layout):
 - (a) Only personnel associated with flying the model aircraft are allowed at or in front of the safety line.
 - (b) At air shows or demonstrations, a straight safety line must be established.
 - (c) An area away from the safety line must be maintained for spectators.
 - (d) Intentional flying behind the safety line is prohibited.
4. RC model aircraft must use the radio-control frequencies currently allowed by the Federal Communications Commission (FCC). Only individuals properly licensed by the FCC are authorized to operate equipment on Amateur Band frequencies.
5. RC model aircraft will not operate within three (3) miles of any pre-existing flying site without a frequency-management agreement (AMA Documents #922-Testing for RF Interference; #923- Frequency Management Agreement)
6. With the exception of events flown under official AMA Competition Regulations, excluding takeoff and landing, no powered model may be flown outdoors closer than 25 feet to any individual, except for the pilot and the pilot's helper(s) located at the flight line.
7. Under no circumstances may a pilot or other person touch a model aircraft in flight while it is still under power, except to divert it from striking an individual. This does not apply to model aircraft flown indoors.
8. RC night flying requires a lighting system providing the pilot with a clear view of the model's attitude and orientation at all times.
9. The pilot of a RC model aircraft shall:
 - (a) Maintain control during the entire flight, maintaining visual contact without enhancement other than by corrective lenses prescribed for the pilot.
 - (b) Fly using the assistance of a camera or First-Person View (FPV) only in accordance with the procedures outlined in AMA Document #550.

Please see your local or regional modeling association's guidelines for proper, safe operation of your model aircraft.

Troubleshooting Guide

Problem	Possible Cause	Solution
Aircraft will not respond to throttle but responds to other controls	Throttle not at idle and/or throttle trim too high	Reset controls with throttle stick and throttle trim at lowest setting
	Throttle servo travel is lower than 100%	Make sure throttle servo travel is 100% or greater
	Throttle channel is reversed	Reverse throttle channel on transmitter
Extra propeller noise or extra vibration	Damaged propeller and spinner, collet or motor	Replace damaged parts
	Propeller is out of balance	Balance or replace propeller
Reduced flight time or aircraft underpowered	Flight battery charge is low	Completely recharge flight battery
	Propeller installed backwards	Install propeller with numbers facing forward
	Flight battery damaged	Replace flight battery and follow flight battery instructions
	Flight conditions may be too cold	Make sure battery is warm before use
Aircraft will not Bind (during binding) to transmitter	Transmitter too near aircraft during binding process	Move powered transmitter a few feet from aircraft, disconnect and reconnect flight battery to aircraft
	Aircraft or transmitter is too close to large metal object	Move the aircraft or transmitter away from the large metal object
	The bind plug is not installed correctly in the bind port or bind port extension	Install bind plug in bind port or bind port extension and bind the aircraft to the transmitter
	Flight battery/Transmitter battery charge is too low	Replace/recharge batteries
Aircraft will not link (after binding) to transmitter	Transmitter too near aircraft during linking process	Move powered transmitter a few feet from aircraft, disconnect and reconnect flight battery to aircraft
	Aircraft or transmitter is too close to large metal object	Move the aircraft or transmitter away from the large metal object
	Bind plug left installed in bind port or bind port extension	Rebind transmitter to the aircraft and remove the bind plug before cycling power
	Aircraft bound to different model memory (ModelMatch™ radios only)	Select correct model memory on transmitter
	Flight battery/Transmitter battery charge is too low	Replace/recharge batteries
	Transmitter may have been bound using different DSM protocol	Bind aircraft to transmitter
Control surface does not move	Control surface, control horn, linkage or servo damage	Replace or repair damaged parts and adjust controls
	Wire damaged or connections loose	Do a check of wires and connections, connect or replace as needed
	Transmitter is not bound correctly or the incorrect model was selected	Re-bind or select correct model in transmitter
	BEC (Battery Elimination Circuit) of the ESC is damaged	Replace ESC
Controls reversed	Transmitter settings are reversed	Perform the Control Direction Test and adjust the controls on transmitter appropriately
Motor power pulses then motor loses power	ESC uses default soft Low Voltage Cutoff (LVC)	Recharge flight battery or replace battery that is no longer performing
	Weather conditions might be too cold	Postpone flight until weather is warmer
	Battery is old, worn out, or damaged	Replace battery
	Battery C rating might be too small	Use recommended battery

Limited Warranty

What this Warranty Covers

Horizon Hobby, Inc. ("Horizon") warrants to the original purchaser that the product purchased (the "Product") will be free from defects in materials and workmanship at the date of purchase.

What is Not Covered

This warranty is not transferable and does not cover (i) cosmetic damage, (ii) damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or due to improper use, installation, operation or maintenance, (iii) modification of or to any part of the Product, (iv) attempted service by anyone other than a Horizon Hobby authorized service center, (v) Product not purchased from an authorized Horizon dealer, or (vi) Product not compliant with applicable technical regulations.

OTHER THAN THE EXPRESS WARRANTY ABOVE, HORIZON MAKES NO OTHER WARRANTY OR REPRESENTATION, AND HEREBY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

Purchaser's Remedy

Horizon's sole obligation and purchaser's sole and exclusive remedy shall be that Horizon will, at its option, either (i) service, or (ii) replace, any Product determined by Horizon to be defective. Horizon reserves the right to inspect any and all Product(s) involved in a warranty claim. Service or replacement decisions are at the sole discretion of Horizon. Proof of purchase is required for all warranty claims. SERVICE OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY.

Limitation of Liability

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY, REGARDLESS OF WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER THEORY OF LIABILITY, EVEN IF HORIZON HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability. If you as the purchaser or user are not prepared to accept the liability associated with the use of the Product, purchaser is advised to return the Product immediately in new and unused condition to the place of purchase.

Law

These terms are governed by Illinois law (without regard to conflict of law principals). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Horizon reserves the right to change or modify this warranty at any time without notice.

WARRANTY SERVICES

Questions, Assistance, and Services

Your local hobby store and/or place of purchase cannot provide warranty support or service. Once assembly, setup or use of the Product has been started, you must contact your local distributor or Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance, please visit our website at www.horizonhobby.com, submit a Product Support Inquiry, or call 877.504.0233 toll free to speak to a Product Support representative.

Inspection or Services

If this Product needs to be inspected or serviced and is compliant in the country you live and use the Product in, please use the Horizon Online Service Request submission process found on our website or call Horizon to obtain a Return Merchandise Authorization (RMA) number. Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as Horizon is not responsible for merchandise until it arrives and is accepted at our facility. An Online Service Request is available at http://www.horizonhobby.com/content/_service-center_render-service-center. If you do not have internet access, please contact Horizon Product Support to obtain a RMA number along with instructions for submitting your product for service. When calling Horizon, you will be asked to provide your complete name, street address, email address and phone number where you can be reached during business hours. When sending product into Horizon, please include your RMA number, a list of the included items, and a brief summary of the problem. A copy of your original sales receipt must be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

NOTICE: Do not ship LiPo batteries to Horizon. If you have any issue with a LiPo battery, please contact the appropriate Horizon Product Support office.

Warranty Requirements

For Warranty consideration, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be serviced or replaced free of charge. Service or replacement decisions are at the sole discretion of Horizon.

Non-Warranty Service

Should your service not be covered by warranty, service will be completed and payment will be required without notification or estimate of the expense unless the expense exceeds 50% of the retail purchase cost. By submitting the item for service you are agreeing to payment of the service without notification. Service estimates are available upon request. You must include this request with your item submitted for service. Non-warranty service estimates will be billed a minimum of ½ hour of labor. In addition you will be billed for return freight. Horizon accepts money orders and cashier's checks, as well as Visa, MasterCard, American Express, and Discover cards. By submitting any item to Horizon for service, you are agreeing to Horizon's Terms and Conditions found on our website http://www.horizonhobby.com/content/_service-center_render-service-center.

NOTICE: Horizon service is limited to Product compliant in the country of use and ownership. If non-compliant product is received by Horizon for service, it will be returned unserviced at the sole expense of the purchaser.

Contact Information

Country of Purchase	Horizon Hobby	Address	Phone Number/Email Address
United States of America	Horizon Service Center (Electronics and engines)	4105 Fieldstone Rd Champaign, Illinois 61822 USA	877-504-0233 Online Repair Request: visit www.horizonhobby.com/service
	Horizon Product Support (All other products)	4105 Fieldstone Rd Champaign, Illinois 61822 USA	877-504-0233 productsupport@horizonhobby.com
United Kingdom	Horizon Hobby Limited	Units 1-4 Ployters Rd Staple Tye Harlow, Essex CM18 7NS United Kingdom	+44 (0) 1279 641 097 sales@horizonhobby.co.uk
Germany	Horizon Technischer Service	Christian-Junge-Straße 1 25337 Elmshorn Germany	+49 (0) 4121 2655 100 service@horizonhobby.de
France	Horizon Hobby SAS	14 Rue Gustave Eiffel Zone d'Activité du Réveil Matin 91230 Montgeron	+33 (0) 1 60 47 44 70 infofrance@horizonhobby.com
China	Horizon Hobby – China	Room 506, No. 97 Changshou Rd. Shanghai, China, 200060	+86 (021) 5180 9868 info@horizonhobby.com.cn

Compliance Information for the European Union

Declaration of Conformity

(in accordance with ISO/IEC 17050-1)

No. HH2012042903

Product(s): Albatros D.Va WWI BNF
Item Number(s): PKZ5980
Equipment class: 1

The object of declaration described above is in conformity with the requirements of the specifications listed below, following the provisions of the European R&TTE directive 1999/5/EC, EMC Directive 2004/108/EC and LVD Directive 2006/95/EC:

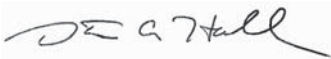
EN 301 489-1 V1.7.1: 2006
EN 301 489-17 V1.3.2: 2008

EN 60950-1:2006+A11

EN55022: 2010
EN55024: 2010



Signed for and on behalf of:
Horizon Hobby, Inc.
Champaign, IL USA
April 29, 2012


Steven A. Hall
Vice President
International Operations and
Risk Management
Horizon Hobby, Inc.

Declaration of Conformity

(in accordance with ISO/IEC 17050-1)

No. HH2012042902

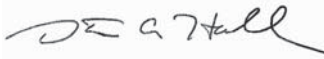
Product(s): Albatros D.Va WWI PNP
Item Number(s): PKZ5975
Equipment class: 1

The object of declaration described above is in conformity with the requirements of the specifications listed below, following the provisions of the EMC Directive 2004/108/EC:

EN55022: 2010
EN55024: 2010



Signed for and on behalf of:
Horizon Hobby, Inc.
Champaign, IL USA
April 29, 2012


Steven A. Hall
Vice President
International Operations and
Risk Management
Horizon Hobby, Inc.

Instructions for disposal of WEEE by users in the European Union



This product must not be disposed of with other waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collections point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or where you purchased the product.

Parts Contact Information • Kontaktinformationen für Ersatzteile • Coordonnés pour obtenir de pièces détachées • Recapiti per i ricambi

Country of Purchase	Horizon Hobby	Address	Phone Number/Email Address
United States of America	Sales	4105 Fieldstone Rd Champaign, Illinois 61822 USA	800-338-4639 Sales@horizonhobby.com
United Kingdom	Horizon Hobby Limited	Units 1-4 Ployters Rd Staple Tye Harlow, Essex CM18 7NS, United Kingdom	+44 (0) 1279 641 097 sales@horizonhobby.co.uk
Germany	Horizon Hobby GmbH	Christian-Junge-Straße 1 25337 Elmshorn, Germany	+49 (0) 4121 2655 100 service@horizonhobby.de
France	Horizon Hobby SAS	14 Rue Gustave Eiffel Zone d'Activité du Réveil Matin 91230 Montgeron	+33 (0) 1 60 47 44 70 infofrance@horizonhobby.com
China	Horizon Hobby – China	Room 506, No. 97 Changshou Rd. Shanghai, China, 200060	+86 (021) 5180 9868 info@horizonhobby.com.cn

Replacement Parts • Ersatzteile • Pièces de rechange • Pezzi di ricambio

Part # Nummer Numéro Codice	Description	Beschreibung	Description	Descrizione
PKZ5901	Decal sheet: Albatros	Dekorbogen: Albatros	Planche de décalcomanies : Albatros	Foglio con decalcomanie: Albatros
PKZ5902	Spinner: Albatros	Spinner: Albatros	Cône : Albatros	Ogiva: Albatros
PKZ5903	Landing gear set: Albatros	Fahrwerk-Set: Albatros	Jeu de train d'atterrissage principal : Albatros	Set del carrello di atterraggio: Albatros
PKZ5906	Horizontal stab: Albatros	Höhenleitwerk: Albatros	Stabilisateur horizontal : Albatros	Stabilizzatore orizzontale: Albatros
PKZ5907	Pilot: Albatros	Pilot: Albatros	Pilote : Albatros	Pilota: Albatros
PKZ5908	Prop adapter: Albatros	Propelleradapter: Albatros	Adaptateur d'hélice : Albatros	Adattatore elica: Albatros
PKZ5910	Pushrod set: Albatros	Schubstangen-Set: Albatros	Jeu de tiges : Albatros	Set asta di spinta: Albatros
PKZ5911	Scale detail set: Albatros	Maßstäblicher Detail-Set: Albatros	Jeu de détails à l'échelle Albatros	Set dettaglio di scala: Albatros
PKZ5914	Motor mount: Albatros	Motorbefestigung: Albatros	Support moteur : Albatros	Supporto del motore: Albatros
PKZ5920	Upper wing: Albatros	Oberflügel: Albatros	Aile supérieure : Albatros	Ala superiore: Albatros
PKZ5921	Lower wing: Albatros	Unterflügel: Albatros	Aile inférieure : Albatros	Ala inferiore: Albatros
PKZ5922	Wing strut set: Albatros	Tragflächenstreben-Set: Albatros	Jeu d'entretoises d'aile : Albatros	Set montante ala: Albatros
PKZ5935	Servo wire tape: Albatros	Servodraht-Klebeband: Albatros	Adhésif pour câble de servo Albatros	Nastro per fili servo: Albatros
PKZ5967	Painted bare fuse: Albatros	Lackisolierte Sicherung: Albatros	Fuselage nu peint : Albatros	Fusoliera nuda verniciata: Albatros
EFLA1030	30-Amp Pro Switch-Mode BEC Brushless ESC	30-Amp Pro Switch-Mode BEC Brushless-ESC	CEV (ESC) brushless 30 A Pro avec BEC Switch-Mode	Controllo elettronico di velocità BEC brushless per 30 A Pro Switch-Mode
SPMAR600	AR600 6-Channel Sport DSM2/ DSMX Receiver	Spektrum AR600 DSMX 6 Kanal Sport Empfänger	Récepteur AR600 6 voies DSM2/DSMX	AR600 6-canali Sport DSM2/DSMX ricevitore
PKZ1030	1800mAh 3S 11.1v LiPo	1800 mAh 3S 11,1 V LiPo	Accu LiPo 1800 mAh 3S 11,1 V	1800 mAh 3S 11,1 V LiPo
PKZ1081	SV80 long lead 3-Wire servo	SV80 langes Servo-Dreileiterkabel	Servo 3 câbles grande longueur SV80	SV80 servo a 3 fili a terminale lungo
PKZ1090	DSV130 3wire digital servo metal gear	DSV130 Digitalservo-Dreileiterkabel Metallgangrad	Servo DSV130 numérique 3 câbles, équipement métal	DSV130 servo digitale a 3 fili, ingranaggio metallico
PKZ1040	2-3 DC Lipo balancing charger	2-3 DC Lipo-Balancer-Ladegerät	Chargeur-équilibreur CC Li-Po 2-3 cellules	Caricabatteria con bilanciatore per 2 o 3 celle Li-Po
PKZ5502	WWI Prop 10 X 8	Erster Weltkrieg-Propeller 10 x 8	Hélice WWI, 10 x 8	Elica Prima Guerra mondiale 10 X 8

Optional Parts • Optionale Bauteile • Pièces optionnelles • Pezzi opzionali

Part # Nummer Numéro Codice	Description	Beschreibung	Description	Descrizione
PKZ1055	Sonic Combat adapter w/mount and leads	Sonic Combat Adapter mit Befestigung und Kabeln	Adaptateur Sonic Combat avec support et câbles	Sonic Combat Adapter con supporto e fili
HBZ4020	Sonic combat mdle: all X-port planes	Sonic Combat Module: alle X-Port-Flugzeuge	Sonic Combat Module : tous avions X-port	Sonic Combat Module: tutti gli aerei con porte X
EFLA250	Park Flyer Tool Assortment, 5 pc	Park Flyer Werkzeugsortiment, 5 teilig	Assortiment d'outils park flyer, 5pc	Park Flyer assortimento attrezzi, 5 pc
EFLAEC302	EC3 Battery Connector, Female (2)	EC3 Akkukabel, Buchse (2)	Prise EC3 femelle (2pc)	EC3 Connettore femmina x batteria (2)
EFLAEC303	EC3 Device/Battery Connector, Male/Female	EC3 Kabelsatz, Stecker/Buchse	Prise EC3 male/femelle	EC3 Connettore batteria maschio/femmina
EFLC3025	Celectra 80W AC/DC Multi-Chemistry Battery Charger	Celectra 80 W AC/DC Multi-Chemistry-Batterieladegerät	Chargeur de batterie AC/DC Celectra 80 W multi-types	Caricabatterie per batteria multichimica 80 W c.a./c.c.
EFLC3020	200W DC multi-chemistry battery charger	200W DC Multi-Batterie Ladegerät - EU	Chargeur multiple DC 200W	200W DC Caricabatterie universale
EFLC4010	Celectra 15VDC 250W Power Supply	Celectra 15 V DC 250-W-Netzstecker	Alimentation Celectra CC 15 V 250 W	Alimentatore Celectra 15V c.c., 250 W
	DX5e DSMX 5-Channel Transmitter	Spektrum DX5e DSMX 5 Kanal sender ohne Empfänger	Emetteur DX5e DSMX 5 voies	DX5e DSMX Trasmettitore 5 canali
	DX6i DSMX 6-Channel Transmitter	Spektrum DX6i DSMX 6-Kanal Sender	Emetteur DX6i DSMX 6 voies	DX6i DSMX Trasmettitore 6 canali
	DX7s DSMX 7-Channel Transmitter	Spektrum DX7s DSMX 7 Kanal Sender	Emetteur DX7s DSMX 7 voies	DX7s DSMX Trasmettitore 7 canali
	DX8 DSMX 8-Channel Transmitter	Spektrum DX8 DSMX 8 Kanal Sender	Emetteur DX8 DSMX 8 voies	DX8 DSMX Trasmettitore 8 canali

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Patents Pending

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Created 04/12 32757

